



Comcast Corporation
300 New Jersey Avenue, NW
Suite 700
Washington, DC 20001

January 30, 2015

VIA ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Notice of *Ex Parte* Communication, *Protecting and Promoting the Open Internet*, GN Docket No. 14-28; *Framework for Broadband Internet Service*, GN Docket No. 10-127

Dear Ms. Dortch:

The 2010 *Open Internet Order* adopted regulations governing “broadband Internet access services” – the “*mass-market retail service*” that allows consumers “to transmit data to and receive data from all or substantially all Internet endpoints”¹ – and expressly disclaimed any intention to affect peering, transit, and other traffic-exchange arrangements.² The 2014 NPRM acknowledged this distinction, explaining that “the *Order* applied to a broadband provider’s use of its own network but did not apply the no-blocking or unreasonable discrimination rules to the exchange of traffic between networks, whether peering, paid peering, content delivery network (CDN) connection, or any other form of inter-network transmission of data, as well as provider-owned facilities that are dedicated solely to such interconnection.”³ The Commission

¹ *Preserving the Open Internet; Broadband Industry Practices*, Report and Order, 25 FCC Rcd 17905, App. A § 8.11(a) (2010) (definition of broadband Internet access service) (emphasis added; subsequent history omitted) (“*2010 Open Internet Order*”).

² *See id.* ¶ 67 n.209 (declining to extend the rules to “existing arrangements for network interconnection, including existing paid peering arrangements”).

³ *Protecting and Promoting the Open Internet*, Notice of Proposed Rulemaking, 29 FCC Rcd 5561, ¶ 59 (2014) (“NPRM” or “Open Internet NPRM”).

“tentatively conclude[d]” in the NPRM to “maintain this approach,”⁴ and Comcast has strongly supported that proposal.⁵

A few parties have persisted in urging the Commission to reverse its prior conclusion and extend its regulatory reach to traffic exchange.⁶ As explained below, the Commission should reject these requests. To the extent the Commission chooses to address traffic-exchange issues in the open Internet proceeding, it can reasonably conclude only that there is no sound basis to displace the successful marketplace negotiations over peering and transit arrangements with prescriptive regulatory mandates.

I. Internet Traffic-Exchange Issues Are Outside the Scope of This Proceeding, and There Is No Sound Basis for the Commission to Intervene in the Well-Functioning Traffic-Exchange Marketplace.

As Chairman Wheeler has acknowledged, traffic exchange “is a different matter that is better addressed separately” from the open Internet proceeding.⁷ Traffic-exchange arrangements

⁴ *Id.*

⁵ See Comments of Comcast Corp., GN Docket Nos. 14-28, 10-127, at 32-39 (July 15, 2014); Reply Comments of Comcast Corp., GN Docket Nos. 14-28, 10-127, at 8-9, 36-39 (Sept. 15, 2014) (“Comcast Reply Comments”); see also Letter from Kathryn A. Zachem, Comcast Corporation, to Marlene H. Dortch, FCC Secretary, GN Docket Nos. 14-28, 10-127 (Nov. 10, 2014).

⁶ See Letter from Angie Kronenberg, COMPTTEL, to Marlene H. Dortch, FCC Secretary, GN Docket No. 14-28 (Jan. 21, 2015) (“COMPTTEL Jan. 21 *Ex Parte*”); Letter from Angie Kronenberg, COMPTTEL, to Marlene H. Dortch, FCC Secretary, GN Docket No. 14-28 (Jan. 13, 2015); Letter from Robert M. Cooper, Counsel, Cogent Communications Group, Inc., to Marlene H. Dortch, FCC Secretary, GN Docket Nos. 14-28, 10-127 (filed Nov. 12, 2014); Letter from Christopher D. Libertelli, Netflix Inc., to Marlene H. Dortch, FCC Secretary, GN Docket No. 14-28, MB Docket Nos. 14-57, 14-90 (Nov. 5, 2014). And Akamai, which previously found the record before the Commission “insufficient to support regulation of peering and interconnection,” now asserts that ISPs should be prohibited “from giving better treatment to captive, or vertically integrated, content or CDNs than to third-party content providers or distributors such as CDNs.” Compare Letter from Scott Blake Harris, Counsel, Akamai Technologies, Inc., to Marlene H. Dortch, FCC Secretary, GN Docket No. 14-28, at 1 (Dec. 16, 2014) with Letter from Scott Blake Harris, Counsel, Akamai Technologies, Inc., to Marlene H. Dortch, FCC Secretary, GN Docket No. 14-28, at 2 (Jan. 8, 2015). Any Commission standard based on the threshold of “better treatment” unquestionably would not be workable and would lead to unnecessary, intrusive regulatory oversight.

⁷ NPRM, Statement of Chairman Tom Wheeler, at 2; see also Richard Greenfield, *Forget Net Neutrality, Peering and Interconnection Set to Be the Internet Issue of 2014*, BTIG RESEARCH, Feb. 11, 2014, <http://www.btigresearch.com/2014/02/11/forget-net-neutrality-peering-and-interconnection-set-to-be-the-internet-issue-of-2014/> (quoting Chairman Wheeler’s statements at the State of the Net Conference on January 28, 2014, indicating that traffic exchange “is not the same issue” as net neutrality).

concern the transport of Internet traffic across the increasingly complex and dynamic backbone architecture of the Internet, and are negotiated based on the amounts of traffic – not the type, content, or source of traffic – being delivered to each party’s network by the other. These arrangements are distinct from the issues that are the subject of the Commission’s open Internet rules, such as the ability of end-users to access particular content or the priority with which content might be delivered to end-users over an ISP’s *last-mile* network. Also, unlike the open Internet rules, which have always been predicated on protecting *mass-market (i.e., residential) consumers*, the exchange of Internet traffic invariably entails arrangements between *sophisticated commercial parties with very large amounts of traffic and their own network facilities* – parties that directly connect only when they perceive mutual value in doing so. And unlike the types of new theoretical behaviors that the open Internet rules are being designed to preclude, traffic-exchange relationships have been in place for years and take various forms – direct and indirect, paid and settlement-free – and rules that address those relationships and business practices thus present very different real world considerations than those implicated by net neutrality requirements.

Peering relationships, paid or otherwise, also do not implicate the blocking or access or prioritization concerns that animate the net neutrality rules.⁸ The presence or absence of any particular traffic-exchange arrangement, paid or free, does not determine whether particular traffic can be delivered to an ISP’s end-users. In order to provide access to all Internet endpoints, ISPs must interconnect broadly with multiple providers. Accordingly, a specific edge provider’s decision to interconnect directly – or not do so – does not determine whether its traffic can flow to the ISP’s end users, as it can simply use one of the many routes that are available.

Contrary to claims by parties such as Netflix, Cogent, and Level 3 – which opportunistically seek to upend longstanding market-based arrangements that have helped fuel the enormously successful and seamless growth of the network of networks that make up the Internet – there is no “terminating access monopoly” or “bottleneck” problem that warrants a

⁸ Claims by parties such as COMPTTEL that paid peering arrangements are a form of blocking are flatly wrong. *See* COMPTTEL Jan. 21 *Ex Parte*. Because an edge provider can have its traffic delivered to an ISP’s end users *without itself having any traffic-exchange agreement in place*, there is no credible basis for asserting that the mere existence of a paid peering agreement means that the traffic in question otherwise would be blocked or that “a content, application, or service provider could avoid being blocked only by paying a fee.” *2010 Open Internet Order* ¶ 67. COMPTTEL compounds its erroneous claims by speciously asserting that the Commission’s *2010 Open Internet Order* prohibited “access tolls” and that parties that enter into paid traffic-exchange arrangements are attempting to exploit an alleged “loophole” that the Commission “left open.” COMPTTEL Jan. 21 *Ex Parte* at 3. In reality, the Commission expressly found that its rules would not affect “existing arrangements for network interconnection, *including existing paid peering arrangements.*” *2010 Open Internet Order* ¶ 67 n.209 (emphasis added); *see also* NPRM ¶ 59 (explaining that “the *Order* . . . did not apply the no-blocking or unreasonable discrimination rules *to the exchange of traffic between networks*, whether peering, *paid peering*, [CDN] connection, or any other form of inter-network transmission of data”) (emphasis added).

departure from the Commission's precedent.⁹ ISPs have built successful businesses by delivering a high-quality Internet experience for their end-users customers, which creates powerful incentives for ISPs to deal reasonably with interconnecting transit providers, CDNs, or any other interconnecting parties. Broadband customers are immensely valuable to ISPs, making it counterproductive for them to harm the edge providers whose content, applications, and services help drive demand for broadband services. In addition, ISPs need interconnection arrangements to get their customers' traffic to other sites on the Internet, a fact that provides ISPs with yet another reason to deal fairly and responsibly with interconnecting parties.¹⁰

ISPs' ability to abuse traffic-exchange relationships is also limited. Edge providers today have more ways to get their traffic to end-users than ever before.¹¹ There are multiple routes and abundant capacity into the major ISPs' networks,¹² and additional connections and capacity can

⁹ The Commission has on many occasions recognized the well-functioning nature of the competitive, unregulated, traffic-exchange marketplace. For instance, in approving the Verizon/MCI merger in 2005, the Commission explained that, "[b]ecause we conclude that the Internet backbone market is sufficiently competitive and will remain so post-merger, it follows that the prices and terms of interconnection in the market will also be competitive." *Verizon Communications Inc. and MCI, Inc. Applications for Approval of Transfer of Control*, Memorandum Opinion and Order, 20 FCC Rcd 18433, ¶ 133 (2005). Similarly, in approving the SBC/AT&T transaction, the Commission noted that "interconnection between Internet backbone providers has never been subject to direct government regulation, and settlement-free peering and degradation-free transit arrangements have thrived." *SBC Communications Inc. and ATT Corp. Applications for Approval of Transfer of Control*, Memorandum Opinion and Order, 20 FCC Rcd 18290, ¶ 132 (2005). The Commission echoed these findings in approving the 2011 Global Crossing/Level 3 transaction, and expressly rejected arguments that the combined company would have an incentive to engage in anticompetitive transit and peering practices. *Applications Filed by Global Crossing Limited and Level 3 Communications, Inc. for Consent to Transfer Control*, Memorandum Opinion and Order and Declaratory Ruling, 26 FCC Rcd 14056, ¶ 27 (2011).

¹⁰ Comcast has a general balance of network investment with its settlement-free peers, *i.e.*, the traffic burden from the peer is in general balance with the traffic burden Comcast imposes on that peer. In fact, the number of settlement-free peers to which Comcast sends more traffic than it receives is roughly equivalent to the number of peers from which Comcast receives more traffic than it sends.

¹¹ It bears emphasis that edge providers, not ISPs, determine the paths that their traffic will follow to reach an ISP. They – or their transport or CDN providers – can and routinely do monitor their traffic flows and rearrange them in real time if, as is often the case, they are "multi-homed."

¹² Comcast alone has dozens of settlement-free peers, and numerous other interconnection relationships. Its settlement-free peers alone have more than enough spare capacity to carry all of Netflix's traffic, which is more than twice the load of the next largest source of downstream traffic. *See Comcast Corporation and Time Warner Cable Inc., Opposition to Petitions to Deny*

easily be arranged at reasonable, market-based prices.¹³ Thanks to fierce competition, unit prices for transit services have dropped over 99% in the past 15 years.¹⁴ Further, the types of relationships at issue are more often formed between ISPs and other network providers, serving as CDNs or transit providers, than they are with edge providers. Any edge provider can get its traffic delivered to an ISP's customers *without any direct commercial relationship with that ISP*.¹⁵ And edge providers with sufficient traffic and their own CDNs can always arrange direct connections, *if they choose*, at prices that are effectively constrained by competitive prices for transit services. Note that any such direct interconnection does not result in the "prioritized" delivery of the interconnected entity's traffic. Once on the ISP's network, that entity's traffic is treated no differently from any other's, and the direct interconnection simply ensures that there is enough capacity *between* the edge provider's network and the ISP's.

Finally, whatever the traffic-exchange relationship used in a particular situation, it has nothing to do with how traffic is treated on ISPs' last-mile networks; all such traffic is treated equally. There has been no credible claim to the contrary. And, in fact, Netflix itself has vehemently asserted that its direct interconnection arrangements with ISPs – which in some cases give Netflix alone the opportunity to store its content in ISPs' own networks – do not constitute "fast lane[s]," because those arrangements concern how Netflix's traffic is delivered to ISP networks and not how it is transported over the ISPs' last-mile networks.¹⁶ Similarly, Google has explained that Google Fiber's peering and collocation arrangements with streaming video providers and CDNs such as YouTube, Netflix, and Akamai are focused on ensuring

and Response to Comments, MB Docket No. 14-57, at 217-20, 234 (Sept. 23, 2014) ("Joint Merger Opposition").

¹³ Because of the availability of multiple indirect interconnection pathways, "the direct routes into Comcast's network for which Comcast *does* charge – CDNs, for example – are subject to market based rates." *Id.* at 219.

¹⁴ *Id.*, Exhibit 5, Constantine Dovrolis, *The Evolution and Economics of Internet Interconnections*, at 23 ("Dovrolis Decl."); *see also* DrPeering International, Abstract, *Internet Transit Prices – Historical and Projected*, <http://drpeering.net/white-papers/Internet-Transit-Pricing-Historical-And-Projected.php>.

¹⁵ As Kevin McElearney, Senior Vice President of Network Engineering for Comcast Cable has explained: "Edge providers have more options for delivering their traffic to end-users than ever before. And it is they (and their transit or CDN provider(s)) that dictate the path their traffic will travel to reach our network. Any edge provider that wants to deliver traffic to our customers can hand its traffic off to numerous other partners, and need never deal directly with us." Joint Merger Opposition at 209 & Exhibit 4, Declaration of Kevin McElearney, ¶ 3; *see generally* Joint Merger Opposition at 208-22 (providing information about Comcast's traffic exchange practices and experiences in the context of responding to Netflix and its former transit providers).

¹⁶ Letter from Christopher Libertelli, Netflix, to FCC Commissioner Ajit Pai, attached to Letter from Henry Goldberg, Counsel, Netflix, to Marlene H. Dortch, FCC Secretary, GN Docket No. 14-28, at 1 (Dec. 11, 2014).

“faster delivery of higher quality video” through efficient network architectures, but do not “prioritize its partners’ video packets over others or otherwise discriminate among Internet traffic.”¹⁷ Accordingly, there is widespread agreement that Internet traffic-exchange arrangements are separate from and independent of the concerns that have animated the drive for open Internet rules.

For all these reasons, there is simply no reason for the Commission to complicate this proceeding any further by addressing the economic, operational, and technical considerations involved with traffic exchange. President Obama’s call for the imposition of open Internet rules pursuant to Title II rightly recognizes that any regulations applicable to interconnection arrangements should be limited to transparency requirements, at most.¹⁸ Wading into these complex issues would only risk upsetting the proper functioning of the traffic-exchange marketplace.

II. Even If the Commission Seeks to Reclassify Broadband Internet Access as a Telecommunications Service, It Should Refrain from Adopting an *Additional* Title II Classification for Internet Traffic Exchange.

As an initial matter, the Open Internet NPRM gave no notice of any proposal to reclassify Internet traffic exchange as a Title II service. Although the NPRM raised the prospect that the FCC could depart from its historical approach of excluding interconnection issues from open Internet rules – asking whether it “should expand the scope of the open Internet rules to cover issues related to traffic exchange”¹⁹ – it nowhere suggested that the Commission might reclassify ISPs’ interconnection-related services to achieve that end.²⁰ The NPRM also alluded to the possibility of reclassification with respect to *broadband Internet access service*, and inquired whether the Commission “should separately identify and classify as a telecommunications service a service that ‘broadband providers . . . furnish to *edge providers*.’”²¹ But importantly, the FCC understood the “edge provider” service “to include the flow of Internet traffic *on the broadband providers’ own network*, and *not how it gets to the broadband providers*’

¹⁷ Letter from Johanna Shelton, Google Inc., to Marlene H. Dortch, FCC Secretary, GN Docket No. 14-28, at 1 (June 13, 2014).

¹⁸ In contrast to the President’s proposal to impose no-blocking rules and a ban on paid prioritization on *broadband Internet access services*, the President suggested regulating “points of interconnection between the ISP and the rest of the Internet” (which he expressly distinguished from the “so-called ‘last mile’”) only in the context of increased transparency rules, and even there only “if necessary.” White House, *Statement by the President on Net Neutrality*, Nov. 10, 2014, <http://www.whitehouse.gov/the-press-office/2014/11/10/statement-president-net-neutrality>.

¹⁹ NPRM ¶ 59.

²⁰ See Letter from Matthew A. Brill, Counsel, National Cable & Telecommunications Association, to Marlene H. Dortch, FCC Secretary, GN Docket Nos. 14-28, 10-127, at 8 (Jan. 14, 2015).

²¹ NPRM ¶ 148 (emphasis added).

networks.”²² Traffic exchange, in contrast, is the mechanism by which traffic gets to broadband providers’ networks. And, of course, as noted above, ISPs much more often provide transit and peering services to other *network operators* than to edge providers.²³ So the reclassification of traffic-exchange services is not a topic within the scope of the NPRM, and any ruling addressing that issue would not be a “logical outgrowth” of the NPRM.²⁴

Even now, interested parties cannot know *why* the FCC would be considering reclassifying Internet traffic-exchange services, assuming that it is contemplating such a thing, or what sort of regulatory regime it might be thinking of devising for those services. After all, there is no basis in the record to regulate ISPs as Title II telecommunications carriers in the provision of transit and peering services.

The FCC has held that “the definition of ‘telecommunications services’ . . . is intended to encompass only telecommunications provided on a common carrier basis.”²⁵ The Commission treats providers of telecommunications as common carriers only if (1) they voluntarily hold themselves out as such or (2) the public interest requires that they do so.²⁶

Based on marketplace evidence, it is clear that ISPs do not voluntarily hold themselves out to exchange Internet traffic on a common carrier basis. To the contrary, ISPs exchange traffic on a *private carriage* basis, as they retain discretion as to whether and on what terms to enter into peering and transit arrangements, rather than holding themselves out to serve a class of

²² *Id.* ¶ 151 (emphasis added).

²³ To the extent that an “edge provider” such as Netflix enters into a paid peering arrangement, it does so in its capacity as a CDN, not as an edge provider. In addition, any wholesale Title II classification would apply to many backbone providers that do not operate as “edge providers” at all.

²⁴ Prior Commission orders have foundered for precisely this reason. *See, e.g., Time Warner Cable v. FCC*, 729 F.3d 137, 170 (2d Cir. 2013) (vacating program carriage standstill rule where questions in NPRM were “too general to provide adequate notice that a standstill rule was under consideration”); *Prometheus Radio Project v. FCC*, 652 F.3d 431, 450 (3d Cir. 2011) (holding notice inadequate where it asked “two general questions” that failed to solicit comment on “overall framework under consideration”); *Council Tree Commc’ns, Inc. v. FCC*, 619 F.3d 235, 254 (3d Cir. 2010) (“an unexpressed intention cannot convert a final rule into a ‘logical outgrowth’ that the public should have anticipated”).

²⁵ *See Federal-State Joint Board on Universal Service*, Report and Order, 12 FCC Rcd 8776, ¶ 785 (1997) (subsequent history omitted); *see also AT&T Submarine Systems, Inc.*, Memorandum Opinion and Order, 13 FCC Rcd 21585, ¶ 6 (1998) (“[T]he term ‘telecommunications carrier’ means essentially the same as common carrier.”), *aff’d sub nom. Virgin Islands Tel. Corp. v. FCC*, 198 F.3d 921 (D.C. Cir. 1999).

²⁶ *See, e.g., Cable & Wireless, PLC*, Cable Landing License, 12 FCC Rcd 8516, ¶¶ 14-15 (1997) (interpreting *NARUC I* to authorize the Commission to mandate a provider to offer telecommunications on a common carrier basis if the public interest so requires).

the public *indiscriminately*.²⁷ It is well settled that “a carrier will not be a common carrier where its practice is to make individualized decisions, in particular cases, whether and on what terms to deal.”²⁸ The record does not contain evidence of a voluntary “holding out” of indiscriminate service by ISPs to peering and transit customers. Rather, ISPs have always made individualized decisions about whether to interconnect with another network and on what terms to do so.²⁹

Specifically, when two commercial parties decide to interconnect, they enter into negotiations regarding a range of *operational* and *technical* issues.³⁰ Through these private negotiations, the parties may determine the number, capacity, and geographic locations of interconnection points that the parties will establish. They may define service level agreements and credits to be paid when a party fails to satisfy such an agreement. And they may set technical routing requirements with which the parties must comply. While these agreements may also involve economic consideration flowing from one party to another in exchange for services rendered, the core focus of the negotiations that give rise to these decisions is on the practicalities of efficient internetworking. The parties reach these arrangements without outside guidance and without external constraints – no Internet Society, Internet Engineering Task Force, or other standards (much less FCC rules) dictate when cash compensation can be part of a direct connection agreement, or which way the compensation may flow. This high degree of discretion in whether and how to deal and individualization in the terms of traffic-exchange arrangements is the antithesis of common carriage.

²⁷ See *Nat’l Ass’n of Regulatory Util. Comm’rs v. FCC*, 525 F.2d 630, 642-644 (D.C. Cir. 1976) (explaining that “the characteristic of holding oneself out to serve indiscriminately” distinguishes common carriers from private carriers and that the Commission does not have “unfettered discretion . . . to confer or not confer common-carrier status on a given entity [based on] the regulatory goals it seeks to achieve”).

²⁸ *Id.* at 641.

²⁹ Indeed, traffic-exchange arrangements have remained the exclusive purview of engineers and businesspeople, even as new uses of the Internet have developed, traffic volumes have multiplied, and new transport arrangements have emerged. See, e.g., Broadband Internet Technical Advisory Group, *Interconnection and Traffic Exchange on the Internet*, at i (Nov. 2014), (“Each network operator stipulates the technical and operational criteria used to evaluate what networks they will interconnect with Connecting networks does not come without costs, and a decision to interconnect requires careful consideration of the benefits compared to the costs incurred to connect at each location.”), <http://www.bitag.org/documents/Interconnection-and-Traffic-Exchange-on-the-Internet.pdf>; Dovrolis Decl. at 8 (“[A]n interconnection between two [Autonomous Systems] represents a business agreement, and as such it is formed only when it is beneficial for both parties.”); Letter from William H. Johnson, Verizon, to Marlene H. Dortch, FCC Secretary, GN Docket Nos. 14-28, 10-127, at 7-9 (Dec. 17, 2014).

³⁰ As correctly noted by Akamai, “[t]he issues of peering and interconnection present complex commercial, technological, and policy considerations.” Letter from Scott Blake Harris, Counsel, Akamai Technologies, Inc., to Marlene H. Dortch, FCC Secretary, GN Docket No. 14-28, at 1 (Nov. 12, 2014).

There also is no credible argument that the public interest requires that ISPs exchange Internet traffic on a common carrier basis. Even assuming that the Commission arguably possesses some power to conscript telecommunications providers into common carriage,³¹ it could at most exercise such power only upon a showing, based on record evidence, that the providers possess market power over the service at issue.³² But the Commission has deliberately sidestepped any market power analysis in this proceeding, and today's competitive conditions could not possibly justify a finding of market power. Moreover, the extraordinary success of the traffic-exchange marketplace to date forecloses any argument that the public interest requires an abrupt reversal of policy. Indeed, this marketplace has generated enormous benefits for consumers without *any* government intervention, let alone the imposition of heavy-handed common carrier mandates.

III. One-Sided Regulation of Two-Sided Relationships Would Make No Sense and Lead to Inevitable Distortion.

The Commission cannot properly assert regulatory jurisdiction over the traffic-exchange practices of ISPs without doing the same for other entities with which ISPs exchange Internet traffic. The nature of peering and transit relationships between network operators is to transmit Internet traffic from each network to the other for further transmission either to a customer or to another network,³³ and therefore necessarily entails the same “telecommunications” functionality on both ends.³⁴ Thus, any rationale the Commission were to adopt for classifying ISPs that also provide backbone peering and transit services as providers of “telecommunications services” would apply just as forcefully (if not more so) to backbone network providers such as Cogent and Level 3, as well as to any CDNs and edge providers that connect to and exchange Internet traffic with ISPs.³⁵ As AT&T has explained, “[t]he key legal rationales for any Title II

³¹ As Comcast has explained, it is far from clear that the Commission actually has statutory authority to force an entity to offer telecommunications on a common carrier basis. See Letter from Kathryn A. Zachem, Comcast Corporation, to Marlene H. Dortch, FCC Secretary, GN Docket Nos. 14-28, 10-127, at 9-10 (Dec. 24, 2014) (explaining that, under the Supreme Court's decision in *Midwest Video II*, any authority to compel cable operators to provide common carriage “must come specifically from Congress,” and noting that the Communications Act does not expressly grant such authority) (“Comcast Dec. 24 *Ex Parte*”).

³² See *id.* (citing cases).

³³ See Michael Kende, FCC Office of Plans and Policy, *The Digital Handshake: Connecting Internet Backbones*, at 1 (Sept. 2000), http://transition.fcc.gov/Bureaus/OPP/working_papers/oppwp32.pdf (explaining that the purpose of peering and transit arrangements is to “exchange traffic destined for each other's end users”).

³⁴ See 47 U.S.C. § 153(50) (defining “telecommunications” as “the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received”).

³⁵ See, e.g., Jon Brodtkin, *See Which ISPs Google, Microsoft, and Netflix Trade Internet Traffic With*, ARS TECHNICA, May 21, 2014, <http://arstechnica.com/information-technology/2014/05/see-which-isps-google-microsoft-and-netflix-trade-internet-traffic-with/>

reclassification decision would . . . necessarily extend” to any entity “that holds itself out to customers as *arranging* for the transmission of data from one point on the Internet to another, whether or not it *owns* transmission facilities.”³⁶ Accordingly, to the extent the Commission identifies a Title II telecommunications service involving the exchange of Internet traffic, it should be broadly defined to encompass all arrangements (between and among backbone providers, ISPs, CDNs, etc.) regarding the exchange of Internet traffic, including peering and transit and the various hybrids that have developed over the years (on-net transit, off-net transit, paid peering), and the new regulatory classification should apply equally to all providers in the ecosystem, including but not limited to those offering the capability to distribute traffic to retail customers.³⁷ Indeed, if the FCC concludes that providing the transmission functions involved in exchanging Internet traffic constitutes the provision of a “telecommunications service,” all providers of these functions are “telecommunications carriers,” and the Commission cannot exempt any particular group from this classification without explaining why such disparate treatment is not entirely arbitrary.

Likewise, if the Commission decides to adopt a case-by-case approach to its review of peering arrangements, it must ensure that such scrutiny also includes an assessment of whether the practices of the edge providers and transit providers involved are just and reasonable. The Commission cannot ignore the fact that a traffic-exchange arrangement establishes a commercial relationship between two sophisticated firms with innumerable options for meeting their transmission needs. Consequently, a host of factors, including the parties’ prior dealings, affect the reasonableness of a particular agreement. Indeed, were the Commission to regulate the traffic-exchange practices of ISPs but not their commercial counter-parties, it would be irrationally presupposing that ISPs and ISPs alone possess the power to engage in harmful behaviors. But no such assumptions can properly be made with respect to the Internet backbone, where edge providers and transit providers can shift enormous amounts of traffic instantaneously, and without advance notice, to routes that are insufficient, causing massive and

(listing CDNs and content providers – including Google, Amazon, Akamai, and Limelight – that connect to and exchange traffic directly with various ISPs).

³⁶ Letter of Robert W. Quinn, AT&T Services, Inc., to Marlene H. Dortch, FCC Secretary, GN Docket No. 14-28, at 7 (May 9, 2014); *see also id.* (explaining that “this category would extend to ISPs such as Earthlink and AOL that do not own last-mile transmission facilities; to [CDNs] such as Akamai that hold themselves out to the commercial public as transporters of data to distant points on the Internet; to providers of e-readers like Amazon.com, which provides Internet access through the Kindle; to companies like Google that provide advertising-supported Internet search services and, on behalf of countless commercial customers, arrange for the transmission of advertising content to end users; and to a variety of other online transport providers ranging from Netflix to Level 3 to Vonage”).

³⁷ For clarity’s sake, the focus here is on Internet traffic, and not necessarily on all traffic that uses the Internet Protocol. Unique issues may arise with regard to the exchange of voice traffic, especially for incumbent local exchange carriers, as the public switched telephone network evolves from TDM to IP formats. The Commission already has proceedings underway on those issues, which can and should remain on a separate track.

harmful congestion. For instance, backbone providers can choose to send traffic to ISPs through their most expensive inbound routes (*i.e.*, routes for which the ISP is *buying* transit), thereby imposing significant costs on the ISP. They can also sell their routes into the ISP to third parties, arbitraging their interconnection arrangement with the ISP. And they can change their traffic flows at whim, deciding on a new route or new point of interconnection, causing stranded facilities for the ISP on the now-abandoned routes. And edge providers often have direct customer relationships with the ISP's end users that they can use to exert pressure on ISPs and to bolster their negotiation leverage (as Netflix did with its "buffering" messages during its disputes with Verizon and AT&T).³⁸ It would be nonsensical for the Commission to conclude that only one side of a traffic-exchange relationship is capable of engaging in unjust and unreasonable practices. Such a skewed approach would invite the counter-parties of ISPs to engage in any objectionable activities they found beneficial, while at the same time raising the specter of regulatory second-guessing for ISPs that would curtail the flexibility that they have long enjoyed to respond quickly to marketplace changes, protect their consumers, and enter into efficient and practical traffic-exchange relationships.

If the Commission were to enable unregulated network providers to take advantage of and capitalize on obligations applicable *only* to ISPs, such an approach would necessarily encourage arbitrage and regulatory gamesmanship.³⁹ COMPTTEL, for example, recently urged the Commission to require broadband ISPs to "interconnect on a bill-and-keep basis with other network operators and edge providers for the exchange of Internet traffic" between the ISP's customers and those of the network operator or edge provider.⁴⁰ This proposed rule is fundamentally and fatally flawed for several reasons. First, as Comcast previously demonstrated, the bill-and-keep model that the Commission adopted for the exchange of voice traffic is utterly unsuitable for the exchange of Internet traffic.⁴¹ Most importantly, the bill-and-keep regime for voice traffic was designed to enable the Commission to eliminate a decades-old system of rate-regulation and implicit subsidies that had been subject to recurrent abuses with a simple, uniform compensation arrangement. In contrast, the exchange of Internet traffic has always been governed by an efficient, competitive marketplace in which unregulated negotiations between private parties have led to a diverse array of successful peering, transit, and CDN alternatives at ever-declining prices. Second, the bill-and-keep regime proved feasible in

³⁸ See, e.g., Ted Johnson, *Verizon Sends Netflix Cease-and-Desist Letter Over On-Screen Warnings*, VARIETY, June 5, 2014, <http://variety.com/2014/digital/news/verizon-sends-netflix-cess-and-desist-letter-over-on-screen-warnings-1201214317/#>.

³⁹ Notably, in other contexts, the Commission has acknowledged the importance of imposing reciprocal obligations on contracting parties to avoid unduly favoring one side over another or encouraging regulatory arbitrage. See, e.g., 47 C.F.R. § 20.11 (enabling local exchange carriers to enter into bill-and-keep arrangements with commercial mobile radio service providers and vice versa); *Connect America Fund*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, ¶ 1353 (2011) (explaining that good faith negotiation obligations for IP-to-IP interconnection extend to all IP-based carriers).

⁴⁰ COMPTTEL Jan. 21 *Ex Parte* at 3.

⁴¹ See Comcast Reply Comments at 38-39.

the voice realm only because *both* parties to the exchange of voice traffic were subject to regulation.⁴² COMPTEL's proposed rule would apply only to broadband ISPs, not to the "transit market, to peering between backbone providers, to backhaul agreements, to the market for [CDN] services, or any other form of Internet traffic exchange services."⁴³ Third, under COMPTEL's proposal, every sender of traffic on the Internet would be able to insist on a direct connection with any ISP and could terminate unlimited amounts of traffic on the ISP's network without charge. Such a result would abandon the mutual exchange of value that has been the hallmark of traffic-exchange arrangements in the past and eliminate any incentive for edge providers and others to send their traffic efficiently. Finally, and critically, even assuming *arguendo* that the Commission were inclined to consider COMPTEL's proposal, it lacks authority to do so in this proceeding because the NPRM provided no notice that the agency would consider prescribing the terms and conditions of Internet traffic-exchange arrangements at all, much less set a rate of zero to replace all the different contractual relationships governing traffic exchange with broadband ISPs.

The Commission plainly must reject this proposed rule and any other such one-sided proposals that would wreak precisely the type of economic havoc and disruption in the Internet ecosystem that the Commission has carefully and successfully avoided for many years. Such disruption would have far-reaching business, investment, traffic flow, and end-user rate implications that are unforeseeable and could potentially be calamitous.⁴⁴

IV. In All Events, Any Imposition of Title II on Wholesale Traffic-Exchange Arrangements Would Have to Be Accompanied by Broad Forbearance.

Comcast has previously explained that, if the Commission decides to reclassify broadband Internet access as a Title II telecommunications service, it should also forbear from all of the restrictions and obligations of Title II, including those arising from Sections 201 and 202, in order to avoid injecting regulatory doubt and risk into the broadband marketplace.⁴⁵ The considerations that warrant this outcome apply equally – and in some cases, to a *greater* extent –

⁴² See, e.g., 47 C.F.R. 51.713 (defining "bill-and-keep arrangements" as "those in which carriers exchanging telecommunications traffic do not charge *each other* for specific transport and/or termination functions or services") (emphasis added).

⁴³ COMPTEL Jan. 21 *Ex Parte* at 4.

⁴⁴ COMPTEL's flawed proposal unquestionably would lead to serious economic consequences, as "regulation that would limit the ability for private parties to negotiate contracts with flexible payment and service terms for Internet transport . . . is likely to generate substantial inefficiencies . . . , as well as substantial risk of investment-retarding uncertainty or regulatory paralysis" and "imposing restrictions on the ability for private firms freely to enter contracts that involve payment among them risks raising total costs of Internet transport, as well as prices to end consumers." Stanley M. Besen and Mark A. Israel, "The Evolution of Internet Interconnection from Hierarchy to 'Mesh': Implications for Government Regulation," INFORMATION ECONOMICS AND POLICY, 25: 235-245, at 240 (2013).

⁴⁵ Comcast Dec. 24 *Ex Parte*.

to Internet traffic exchange. Thus, any reclassification of a *separate* wholesale/interconnection service as a Title II telecommunications service should be accompanied by such forbearance as well.

The wholesale marketplace for Internet traffic exchange has never been subject to *any* regulation – let alone burdensome common-carrier restrictions and obligations – and has functioned extremely well in the absence of such regulation. Even more than with retail broadband service, this “deregulatory status quo,” coupled with the industry’s reliance on this deregulatory approach in investing in new networks, militates in favor of a streamlined forbearance analysis.⁴⁶

The Commission need not analyze the traffic-exchange marketplace on a granular, geographic-area-by-geographic-area basis in order to determine that the standard for forbearance from the restrictions and obligations of Title II is easily satisfied nationwide. Given the success of this marketplace to date, there is simply no sound argument that Title II regulation is necessary to ensure just and reasonable rates or to protect consumers and the public interest.⁴⁷ This marketplace is robustly competitive,⁴⁸ as the FCC has found on multiple occasions cited above, and the fact that traffic-exchange negotiations occur between sophisticated commercial parties further reduces the need for heavy-handed Title II obligations.⁴⁹

Finally, as in the retail context, Section 706⁵⁰ serves as a backstop that provides the Commission with authority to address any concerns that may arise in the future. The Commission will be fully able to establish rules governing Internet traffic exchange should they become necessary *without* relying on the provisions of Title II. The availability of this authority bolsters the case for forbearance.

* * * * *

⁴⁶ See *Framework for Broadband Internet Service*, Notice of Inquiry, 25 FCC Rcd 7866, ¶ 73 (2010).

⁴⁷ See 47 U.S.C. § 160(a).

⁴⁸ See *id.* § 160(b).

⁴⁹ Indeed, as the FCC acknowledged when carving “enterprise service offerings” out of the rules it adopted in 2010, enterprise customers “tend to be sophisticated and knowledgeable” and thus typically do not require special regulatory protections. *2010 Open Internet Order* ¶ 45 & n.147.

⁵⁰ 47 U.S.C. § 1302.

The traffic-exchange marketplace continues to develop in healthy ways. Capacity and options continue to increase, gargantuan volumes of traffic are successfully delivered every hour of the day, and prices continue to decline. There is not the slightest legal or factual basis that could justify the Commission's abandonment of the "hands-off" approach that has served the Internet ecosystem and the American public so well.

Respectfully submitted,

/s/ Kathryn A. Zachem

Senior Vice President
Regulatory and State Legislative Affairs
Comcast Corporation